known manner, in response to instructions from the processor 210. Further, these signals may be combined with the standard audio signal produced by the audio decoder (described above) in the auxiliary data processor 50 of an interactive TV system. When the sound representative signal and the standard audio signal are combined, the resulting signal represents the combination of the sound generated by the sound adapter and the broadcast audio signal. It is also possible to selectively combine these two sound representative signals under the control of the processor 210.

The timing of the generation and display of the graphical image and sound representative signals, may be controlled by receipt of the time code data from the data stream. This enables an executable code module to synchronize the display of processor generated image and presentation of processor generated sound to the broadcast video and audio. It is further possible to synchronize the operation of the interactive TV application by the insertion of specialized packets into the data stream which cause an interrupt of the code currently executing in processor 210. Stream I/O 208 monitors the data stream for such specialized packets, and generates an interrupt, in a known manner, for the processor 210. Processor 210 responds to that interrupt, also in known manner, by executing an interrupt service routine (ISR). This ISR may be used for synchronization of the interactive TV application, or other purposes.

A client computer 22 in a distributed computing system as illustrated in FIG. 1 does not need a mass storage device, nor a large amount of RAM 212. Such a system decreases the cost of a client computer, and increases the functionality of the lower cost client computers. In addition, such a client computer has the option of participating in a distributed computing function, may join in the distributed computing function at any time (or may drop out and return later), and may participate at its own pace.

What is claimed is:

1. A distributed computer system comprising:

a source of a data stream providing a series of time division multiplexed packets, ones of which contain auxiliary data that represent a video program, and others of which represent a distributed computing application associated with said video program, and wherein said distributed computing application is repetitively transmitted independent of receiving client computer apparatus during times that said video program is transmitted;

a client computer, which includes a packet selector connected to said source for selecting and directing packets containing said auxiliary data representing said video program to a video signal processor and selecting and directing packets containing said associated distributed computing application to a further processor; and

said further processor including means to assemble said distributed computing application and execute said distributed computing application to form an interactive video program in which execution of said distributed computing application alters said video program.

2. The distributed computer system of claim 1 wherein said further processor includes a graphics adapter for creating graphical images and interactively combining said graphical images with said video program.

3. The distributed computer system of claim 1 wherein said video program is a television program and said further processor includes a graphics adapter for creating graphical images and interactively combining said graphical images with said television program.

4. The distributed computer system of claim 1 wherein said further processor includes a sound adapter for creating

synthesized sound and interactively combining said synthesized sound with said video program.

5. The distributed computer system of claim 1 wherein said further processor includes memory for storing program controls and responsive thereto requests of said packet 5 selector a code and/or data module from the data stream.

6. A distributed computer system comprising:

a source of a time division multiplexed packet signal including a plurality of distributed computing applications, each distributed computing application 10 being repetitively transmitted independent of receiving client computer apparatus, and each of said distributed computing applications being in a form of a series of packets;

a first one of packets of a respective series containing data 15 representing an executable code module and including identification information indicating that the first one of packets of said series contains data representing said executable code module;

a second one of packets of the series contains data 20 representing a data module and includes identification information indicating that said second one of packets contains data representing the data module; and

a third one of packets of the series contains auxiliary data 25 and includes identification information indicating that the third one of packets contains auxiliary data;

a client computer including a data receiver for selecting packets of one of the plurality of distributed computing applications, and extracting the corresponding distrib- 30 uted computing application representative data included in the selected packets and applying it to computer program controlled apparatus for executing the extracted distributed computing application, said data receiver extracting auxiliary data from auxiliary 35 packets in the data stream and supplying it to an auxiliary data processor.

7. A distributed computer system comprising:

a data stream source producing a data stream including a series of packets representing a plurality of time divi- 40 sion multiplexed signals, one of said signals including data representing a distributed computing application, which distributed computing application is repetitively transmitted independent of receiving client computer apparatus, and at least one of the packets of the signal 45 representing the distributed computing application includes a directory module containing information inter-relating packets associated with said distributed computing application;

a client computer, receiving the data stream, extracting the 50 distributed computing application representative data from the data stream, and executing the extracted distributed computing application; and wherein

the client computer extracts said directory module from 55 the data stream and using data contained in the directory module extracts packets associated with said distributed computing application and builds said distributed computing application and executes said distributed computing application. 60

8. The computer system of claim 7, wherein:

a first one of the series of packets contains data representing an executable code module and includes iden-

tification information indicating that the first one of the series of packets contains data representing an executable code module;

a second one of the series of packets contains data representing a data module and includes identification information indicating that the second one of the series of packets contains data representing a data module;

a third one of the series of packets contains data representing said directory module inter-relating respective transmitted modules associated with a single distributed computing application, and includes identification information indicating that the third one of the series of packets contains data representing said directory module; and

a fourth one of the series of packets contains auxiliary data and includes identification information indicating that the fourth one of the series of packets contains auxiliary data.

9. In a distributed computer system, a client computer, comprising:

an input terminal for receiving a packet data stream including packets of video signal time multiplexed with packets of data representing a distributed computing application which distributed computing application is repetitively transmitted independently of said client computer and at least one of the packets representing the distributed computing application includes a directory containing information inter-relating ones of the packets containing said distributed computing application;

a data stream receiver, coupled to said input terminal, for receiving the data stream, providing separate data streams of said video signal and said distributed computing application, extracting said directory packet and responsive to the directory, extracting packets containing said distributed computing application representative data; and

a processing unit, coupled to the data stream receiver, for assembling said distributed computing application and executing the distributed computing application comprising:

a system bus;

read/write memory, coupled to the system bus;

a data stream input/output adapter, coupled between the data stream receiver and the system bus, for receiving the extracted distributed computing application representative data from the data stream receiver, and storing it in the read/write memory, and having a control output terminal coupled to the selection control input terminal of the data stream selector, for producing the selection control signal; and

a processor, coupled to the system bus, for controlling the data stream input/output device to generate a selection control signal selecting a specified one of the plurality of data streams, and for assembling and executing the distributed computing application stored in the read/write memory.

\* \* \* \* \*

10.    A method of ordering an item using a distributed computing system including at least one client (20) and at least one server (10), the method comprising:

showing and/or describing an item offered for sale to a user (80) via the client;

enabling the user to order the item by a single interaction with the client; and

in response to the single interaction with the client (20), placing an order for the offered item.

11.    The method of claim 10, wherein the single interaction is by one of the group including:

a pressing of a single button; and

a pressing of a single button on a TV remote control.

12.    The method of claim 10, wherein placing the order is achieved by using:

information related to the item being offered for sale; and

user related personal information.

13. The method of claim 12, wherein the personal information includes at least one of the group including a user's name, address, method of payment and credit card number.

14. The method of claim 12, wherein the personal information is stored in memory in the client.

15. The method of claim 10, wherein the distributed computing system is an interactive television system and wherein the showing and/or describing of the item is, at least in part, by television signal.

16. The method of claim 10, wherein the client (20) includes an auxiliary data processor (50) and a client computer (22,24,26).

17. The method of claim 12, wherein the client (20) is associated with at least a set top box, and wherein the personal information is stored at the set top box.

18. The method of claim 17, wherein the set top box is in communication with a local computer (40) and associated storage (70) and wherein the method further comprises:

    the client (20) retrieving information from one or more of the local computer (40) and the mass storage (70).

19. The method of claim 18, wherein the method further comprises:

    controlling the client (20) by means of the local computer (40).

20.     The method of claim 18, wherein the local computer (40) is part of a local area network.

21.     The method of claim 10, wherein the system further includes a central processing facility (60) in communication with the server (10) and wherein the method comprises:

        sending information used in processing the order from the client (20) to the central processing facility (60).

22.     The method of claim 10, further comprising:

        sending an order confirmation to the user (80) to confirm the order.

23.     The method of claim 21, further comprising:

        communicating information between the client (20) and the server (10) via the central processing facility (60).

24.     The method of claim 23, wherein a telephone system acts as the central processing facility (60).

25.     The method of claim 10 including receiving at the client (20) a data stream including:

        (a)     information to show and/or describe the item offered for sale via the client; and

(b)    an application, executable by the client, to enable the user to order the item by the single interaction with the client.

26.    The method of claim 25 wherein the data stream further includes an item identifier to identify the item offered for sale.

27.    The method of claim 26 wherein the item identifier includes any one a group of identifiers including a time code and a command.

28.    A method of ordering an item, the method comprising:

providing a client with information to show and/or describe an item offered for sale to a user; and

providing the client with an application to enable the user to order the item by a single interaction with a client, responsive to which an order is placed for the offered item.

29.    The method of claim 28, wherein the single interaction comprises any one of the group including:

a pressing of a single button; and

a pressing of a single button on a TV remote control.

30.    The method of claim 28, including receiving the order from the client, the order including:

information related to the item being offered for sale; and

user related personal information.

31.    The method of claim 30, wherein the personal information comprises any one of the group including a user's name, address, method of payment and credit card number.

32.    The method of claim 30, wherein application is to retrieve the personal information from a memory associated with the client.

33.    The method of claim 28, including providing the information in the form of a television signal.

34.    The method of claim 28 including communicating with a central processing facility (60) and wherein the client sends the order to the central processing facility (60) for receipt via a transceiver (103).

35.    The method of claim 34 wherein a telephone system acts as the central processing facility (60).

36.    The method of claim 28 including providing an order confirmation to the client to confirm the order.

37.    The method of claim 28 including  multiplexing the provision of the information and the application to the client to thereby generate a data stream for transmission to the client.

38.    A computer system to order an item, the system comprising:

a data processing system (50) to show and/or describe an item offered for sale to a user (80); and

a client (22, 24, 26, 50) to enable the user to order the item by a single interaction with the client and, in response to the single interaction, to place an order for the offered item.

39.    The system of claim 38, wherein the single interaction comprises any one of the group including:

 a pressing of a single button; and

a pressing of a single button on a TV remote control.

40.    The system of claim 38, wherein the client is to place the order using:

information related to the item being offered for sale; and

user related personal information.

41.     The system of claim 40, wherein the personal information comprises any one of the group including a user's name, address, method of payment and credit card number.

42.     The system of claim 40, wherein the personal information is stored in memory of the client.

43.     The system of claim 38, wherein the distributed computing system is an interactive television system and wherein the showing and/or describing of the item by the data processing system (50) is, at least in part, performed utilizing a television signal.

44.     The system of claim 38, wherein the client (20) includes a client computer (22).

45.     The system of claim 38, wherein the client computer (22) is associated with at least a set top box, and wherein the personal information is stored at the set top box.

46.     The system of claim 45, wherein the set top box is in communication with a local computer (40) and associated storage (70) and wherein the client computer (22) is to retrieve information from one or more of the local computer (40) and the mass storage (70).

47.     The system of claim 46, wherein the local computer (40) controls the client computer (22).

48. The system of claim 46, wherein the local computer (40) is part of a local area network.

49. The system of claim 38, including a central processing facility (60) in communication with a server (10) and wherein the client (20) sends information used in processing to the central processing facility (60).

50. The system of claim 49 wherein the server (10) is to send an order confirmation to the user (80) to confirm the order.

51. The system of claim 49, wherein the central processing facility (60) is to communicate information between the client and the server (10).

52. The system of claim 51 wherein a telephone system acts as the central processing facility (60).

53. The system of claim 38 including a data stream receiver (207) to receive a data stream including:

   information to show and/or describe the item offered for sale via the client; and

   an application, executable by the client, to enable the user to order the item by a single interaction with the client.

54.    The system of claim 53 wherein the data stream receiver (207) includes an auxiliary data extractor (204) to extract the information from the data stream and a packet data extractor (206) to extract the application from the data stream.

55.    The system of claim 54 wherein the auxiliary data extractor (204) provides the information to the data processing system (50) and the packet data extractor (200) provides the application to the client (224).

56.    The system of claim 53 wherein the data stream further includes an item identifier to identify the item offered for sale.

57.    The system of claim 56 wherein the item identifier includes any one a group of identifiers including a time code and a command.

58.    A computer system to facilitate ordering an item, the system comprising:

a data source (107) to provide a client with information to show and/or describe an item offered for sale to a user; and

an application source (101) to provide a client with an application to enable the user to order the offered item by a single interaction with a client, responsive to which an order is placed for the offered item.

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59.　The system of claim 58, wherein the single interaction comprises any one of the group including:

a pressing of a single button; and

a pressing of a single button on a TV remote control.

60.　The system of claim 58, including a data receiver (103) to receive the order from the client, the order including:

information related to the offered item; and

user related personal information.

61.　The system of claim 60, wherein the personal information comprises any one of the group including a user's name, address, method of payment and credit card number.

62.　The system of claim 60, wherein application is to retrieve the personal information from a memory associated with the client.

63.　The system of claim 58, wherein the data source (107) is to provide the information in the form of a television signal.

64.　The system of claim 58 including a data transceiver (103) to communicate with a central processing facility (60) and wherein the client sends the order to the central processing facility (60) for receipt via the data transceiver (103).

65. The system of claim 64 wherein a telephone system acts as the central processing facility (60).

66. The system of claim 58 wherein the data source (107) is to provide an order confirmation to the client to confirm the order.

67. The system of claim 58 including a multiplexer to multiplex the provision of the information and the application to the client to thereby generate a data stream for transmission to the client.

68. A method of ordering an item using an interactive television system including at least one client (22, 50) and at least one server (10), the method comprising:

using the server (10) to provide data, some of which represents video and some of which represents a computing application, to the client;

at the client, causing the video to be displayed, and executing the computing application to cause display of interactive information;

using one or more of the displayed video and the interactive information to show and/or describe an item offered for sale to a television viewer (80);

enabling the viewer (80) to select the item by interacting with the client (22,50); and

in response to the viewer interaction, placing an order for the displayed item.

69. The method of claim 68, wherein the user interaction causes display of instructions to solicit information necessary to place the order.

70. The method of claim 69, wherein the information is solicited using one or more of an on-screen display and voice instructions.

71.    The method of claim 68, wherein the viewer interaction is by way of a single command.

72.    The method of claim 71, wherein the single command is by one of the group of:

   the pressing of a single button; and

   the pressing of a single button on a TV remote control.

73.    The method of claim 68, wherein placing the order is achieved by using: information related to the item being offered for sale and viewer related personal information.

74.    The method of claim 73, wherein the personal information includes at least one of the group consisting of the viewer's name, address, method of payment and credit card number.

75.    The method of claim 74, wherein the personal information is stored in memory at the client (22, 50).

76.    The method of claim 74, wherein the system further includes a local computer (40) and associated storage (70) and wherein the method further comprises:

   using the client (22, 50) to retrieve information from one or more of the local computer (40) and the mass storage (70).

77.     The method of claim 76, wherein the method further comprises:

controlling the client (20, 50) by means of the local computer (40).


78.     The method of claim 76, wherein the local computer (40) is part of a local

area network.


79.     The method of claim 68, wherein the system further includes a central

processing facility (60) in communication with the server (10) and wherein the

method comprises:


        sending information used in processing the order from the client

        computer (22) to the central processing facility (60).


80.     The method of claim 79, further comprising:


        communicating information between the client (22, 50) and the server (10)

        via the central processing facility (60).


81.     The method of claim 79, wherein a telephone system acts as the central

processing facility (60).


82.     The method of claim 68, further comprising:

sending an order confirmation to the user (80) to confirm the order.

83. The method of claim 68, wherein the server (10) provides data in a series of multiplexed packets, ones of which contain data representing the video, and others of which represent the computing application.

84. The method of claim 83, wherein the computing application is repetitively transmitted during times that the video is transmitted.

85. The method of claim 83, wherein the client (22,50) includes a client computer (22) and an auxiliary processor (50), the method comprising:

using the auxiliary data processor (50) to process data representing the video, and

using the client computer (22) to execute the computing application.

86. The method of claim 85, wherein the client computer and the auxiliary data processor are contained in a set top box.

87. A method of ordering an item using an interactive television system, the method comprising:

receiving data, some of which represents video and some of which represents a computing application;

causing the video to be displayed;

executing the computing application to cause display of interactive information;

using one or more of the displayed video and the interactive information to show and/or describe an item offered for sale to a television user (80);

enabling the user (80) to select the item by way of an interaction; and

in response to the interaction, placing an order for the displayed item.

88.    The method of claim 87, wherein the viewer interaction causes display of instructions to solicit information necessary to place the order.

89.    The method of claim 88, wherein the information is solicited using one or more of an on-screen display and voice instructions.

90.    The method of claim 87, wherein the viewer interaction is by way of a single command.

91.    The method of claim 90, wherein the single command is by one of the group of:

        the pressing of a single button; and

        the pressing of a single button on a TV remote control.

92.     The method of claim 87, wherein placing the order is achieved by using: information related to the item being offered for sale and user related personal information.

93.     The method of claim 92, wherein the personal information includes at least one of the group consisting of the user's name, address, method of payment and credit card number.

94.     The method of claim 93, wherein the personal information is stored in local memory.

95.     The method of claim 87, further comprising: communicating information via a central processing facility (60).

96.     The method of claim 95, wherein a telephone system acts as the central processing facility (60).

97.     The method of claim 87, further comprising receiving an order confirmation to the user (80) to confirm the order.

98.     The method of claim 87, wherein the data comprises a series of multiplexed packets, ones of which contain data representing the video, and others of which represent the computing application.

99.     The method of claim 87, wherein a client (22,50) includes a client computer (22) and an auxiliary processor (50), the method comprising:

using the auxiliary data processor (50) to process data representing the video, and

using the client computer (22) to execute the computing application.

100. The method of claim 99, wherein the client computer and the auxiliary data processor are contained in a set top box.

101. A method of ordering an item using an interactive television system, the method comprising:

> providing data, some of which represents video to be displayed and some of which represents a computing application to be executed to display interactive information, to the client, the client to use one or more of the displayed video and the interactive information to show and/or describe an item offered for sale to a television user (80) and to enable the user (80) to select the item by interacting with the client (22, 50); and

> in response to the interaction, receiving an order for the displayed item.

102. The method of claim 101, wherein the received order includes: information related to the item being offered for sale and user related personal information.

103.    The method of claim 102, wherein the personal information includes at least one of the group consisting of the user's name, address, method of payment and credit card number.

104.    The method of claim 101, including providing the data in a series of multiplexed packets, ones of which contain data representing the video, and others of which represent the computing application.

105.    The method of claim 101, wherein the computing application is repetitively transmitted during times that the video is transmitted.

106.    An interactive television system comprising:

a server (10) to provide data, some of which represents video and some of which represents a computing application, to the client;

a client to:

cause the video to be displayed;

execute the computing application to cause display of interactive information;

use one or more of the displayed video and the interactive information to show and/or describe an item offered for sale to a television user (80);

enable the user (80) to select the item by interacting with the client (22,50); and

in response to the interaction, place an order for the displayed item.

107.    The system of claim 106, wherein the user interaction causes display of instructions to solicit information necessary to place the order.

108.    The system of claim 107, wherein the information is solicited using one or more of an on-screen display and voice instructions.

109.    The system of claim 106, wherein the interaction is by way of a single command.

110.    The system of claim 109, wherein the single command is by one of the group of:

the pressing of a single button; and

the pressing of a single button on a TV remote control.

111.    The system of claim 106, wherein placing the order is achieved by using: information related to the item being offered for sale and user related personal information.

112.    The system of claim 111, wherein the personal information includes at least one of the group consisting of the user's name, address, method of payment and credit card number.

113.    The system of claim 111, wherein the personal information is stored in memory at the client (22, 50).

114.    The system of claim 111, wherein the system further includes a local computer (40) and associated storage (70) and wherein the method further comprises:

using the client (22, 50) to retrieve information from one or more of the local computer (40) and the mass storage (70).

115.  The system of claim 106, wherein the client (20, 50) is to be controlled by means of the local computer (40).

116.  The system of claim 115, wherein the local computer (40) is part of a local area network.

117.  The system of claim 106, wherein the system further includes a central processing facility (60) in communication with the server (10) and wherein the client is to send information used in processing the order to the central processing facility (60).

**118.  The system of claim 117, wherein the** client (22, 50) is to communicate with the server (10) via the central processing facility (60).

119.  The system of claim 118, wherein a telephone system acts as the central processing facility (60).

**120.  The system of claim 106, wherein the server is to send** an order confirmation to the user (80) to confirm the order.

121.  The system of claim 106, wherein the server provides data in a series of multiplexed packets, ones of which contain data representing the video, and others of which represent the computing application.

122.  The system of claim 106, wherein the computing application is repetitively transmitted during times that the video is transmitted.

123.    The system of claim 106, wherein the client (22,50) includes a client computer (22) and an auxiliary processor (50), and:

the auxiliary data processor (50) is to process data representing the video, and

the client computer (22) is to execute the computing application.

124.    The system of claim 123, wherein the client computer and the auxiliary data processor are contained in a set top box.

125.    An interactive television system to order an item, the system comprising:

a receiver (207) to receive data, some of which represents video and some of which represents a computing application; and

a processing unit (224) to:

execute the computing application to cause display of interactive information;

using the interactive information, show and/or describe an item offered for sale to a television user (80);

enable the user (80) to select the item by way of an interaction; and

in response to the interaction, place an order for the displayed item.

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126.     The system of claim 125, wherein the interaction causes the processing unit to display instructions to solicit information necessary to place the order.

127.     The system of claim 126, wherein the information is solicited using one or more of an on-screen display and voice instructions.

128.     The system of claim 125, wherein the interaction is by way of a single command.

129.     The system of claim 128, wherein the single command is by one of the group of:

        the pressing of a single button; and

        the pressing of a single button on a TV remote control.

130.     The system of claim 125, wherein the processing unit places the order using:

        information related to the item being offered for sale and user related personal information.

131.     The system of claim 130, wherein the personal information includes at least one of the group consisting of the user's name, address, method of payment and credit card number.

132.    The system of claim 130, including a local memory to store the personal information memory.

133.    The system of claim 125, further comprising a central processing facility (60) to communicate information.

134.    The system of claim 133, wherein a telephone system acts as the central processing facility (60).

135.    The system of claim 125, further comprising a receiver to receive an order confirmation to confirm the order.

136.    The system of claim 125, wherein the data comprises a series of multiplexed packets, ones of which contain data representing the video, and others of which represent the computing application, the system including a first extractor to extract the video and a second extractor to extract the computing application from the data.

137.    The system of claim 125, including:

an auxiliary data processor (50) to process the video, and

a client computer (22) to execute the computing application.

138.    The system of claim 137, wherein the client computer and the auxiliary data processor are contained in a set top box.

139.    An interactive television system to order an item, the system comprising:

a server (10) to provide data, some of which represents video to be displayed and some of which represents a computing application to be executed to display interactive information, to a client, the client to use one or more of the displayed video and the interactive information to show and/or describe an item offered for sale to a television user (80) and to enable the user (80) to select the item by interacting with the client (22,50); and

a receiver, in response to the interaction, to receive an order for the displayed item.

140.    The system of claim 139, wherein the received order includes:

information related to the item being offered for sale and user related personal information.

141.    The system of claim 140, wherein the personal information includes at least one of the group consisting of the user's name, address, method of payment and credit card number.

142.    The system of claim 139, wherein the server is to provide the data in a series of multiplexed packets, ones of which contain data representing the video, and others of which represent the computing application.

143.     The system of claim 16, wherein the server is to repetitively transmit the computing application during times that the video is transmitted.

144.     A method of placing an order for an item, the method comprising:

using a server system:

communicating a data stream to a client system, the data stream including information related to an item offered for sale; and

using a client system:

receiving an order request from a user;

automatically determining an item identity for an item to which the order request pertains utilizing the information related to the item offered for sale;

automatically retrieving personal information of the user previously stored in a storage device; and

placing an order, including the item identity and the retrieved personal information.

145.     The method of claim 144 wherein the order request is received at the client system through detection of a purchase action by the user utilizing the client system.

146.    The method of claim 145 wherein the purchase action is performed during the showing and/or describing of the item via the client system utilizing the information related to the item offered for sale.

147.    The method of 145 wherein the purchase action includes input of the item identity into the client system.

148.    The method of claim 145 wherein the automatic determination of the item identity includes relating the purchase action to the information related to the item.

149.    The method of claim 148 wherein the relating includes the detecting of the purchase action during an offer of the item as specified any one of a group including by a time code and a command included within the information relate to the item.

150.    The method of claim 144 wherein the item identity is received within the data stream transmitted from the server system to the client system.

151.    The method of claim 144 wherein the data stream includes multiplexed first and second streams of packets, the first stream of packets including display information to generate an image on a display of the client system, and the second stream of packets including a computing application.

152.    The method of claim 149 wherein the time code is received within the data stream transmitted from the server system to the client system.

153.    The method of claim 145 including prompting the user to perform the purchase action utilizing the client system.

154.    The method of claim 153 wherein the prompting includes displaying a visual prompt on a display of the client system.

155.    The method of claim 154 wherein the visual prompt includes any of a group including an indicia, instructions and a menu.

156.    The method of claim 153 wherein the prompting includes generating an audio prompt via an audio reproduction unit of the client system

157.    The method of claim 156 wherein the audio prompt comprises any one of a group including instructions, options and a menu.

158.    The method of claim 145 wherein the detection of the purchase action includes detecting an interaction by the user with a control device of the client system.

159.    The method of claim 158 wherein the interaction comprises a single action operation performed by the user.

160.    The method of claim 159 wherein the single action operation comprises a single selection of a button of a remote control device.

161.    The method of claim 144 wherein the storage device is associated with the client system and wherein the order is placed by the client system and communicated to the server system.

162.    The method of claim 144 including receiving a client application program at the client system from the server system, the client application program to place the order.

163.    The method of claim 162 wherein the client application program is received as part of the data stream.

164.    The method of claim 144 including receiving, at the client system from the server system, an order confirmation responsive to a processing of the order by the server system.

165.    A method of placing an order for an item, the method comprising:

receiving an order request from a user at a client system;

automatically determining an item identity for an item to which the order request pertains;

automatically retrieving personal information of the user previously stored in a storage device; and

placing an order, including the item identity and the retrieved personal information, for processing by a server system in communication with the client system.

166. The method of claim 165 wherein the order request is received at the client system through detection of a purchase action by the user utilizing the client system.

167. The method of claim 166 wherein the purchase action is performed during the showing and/or describing of the item via the client system.

168. The method of 166 wherein the purchase action includes input of the item identity into the client system.

169. The method of claim 166 including receiving information, at the client system from the server system, related to the item and wherein the automatic determination of the item identity includes relating the purchase action to the received information related to the item.

170. The method of claim 169 wherein the relating includes the detecting of the purchase action during an offer of the item as specified any one of a group including by a time code and a command included within the received information relate to the item.

171. The method of claim 165 wherein the item identity is received within a data stream transmitted from the server system to the client system.

172.    The method of claim 171 wherein the data stream includes multiplexed first and second streams of packets, the first stream of packets including display information to generate an image on a display of the client system, and the second stream of packets including an computing application.

173.    The method of claim 170 wherein the time code is received within a data stream transmitted from the server system to the client system.

174.    The method of claim 166 including prompting the user to perform the purchase action utilizing the client system.

175.    The method of claim 175 wherein the prompting includes displaying a visual prompt on a display of the client system.

176.    The method of claim 175 wherein the visual prompt includes any of a group including an indicia, instructions and a menu.

177.    The method of claim 174 wherein the prompting includes generating an audio prompt via an audio reproduction unit of the client system

178.    The method of claim 177 wherein the audio prompt comprises any one of a group including instructions, options and a menu.

179.    The method of claim 166 wherein the detection of the purchase action includes detecting an interaction by the user with a control device of the client system.

180.    The method of claim 179 wherein the interaction comprises a single action operation performed by the user.

181.    The method of claim 180 wherein the single action operation comprises a single selection of a button of a remote control device.

182.    The method of claim 165 wherein the storage device is associated with the client system and wherein the order is placed by the client system and communicated to the server system.

183.    The method of claim 165 including receiving a client application program at the client system from the server system, the client application program to receive the order request and to place the order.

184.    The method of claim 183 wherein the client application program is received as part of a data stream including content for display by the client system.

185.    The method of claim 165 including receiving, at the client system from the server system, an order confirmation responsive to the processing of the order by the server system.

186.    A method of facilitating placing of an order for an item, the method comprising communicating a data stream to a client system, the data stream including:

information related to an item offered for sale; and

an application program for execution by the client system to receive an order request from a user, automatically to determine an item identity for an item to which the order request pertains utilizing the information related to the item offered for sale, automatically to retrieve personal information of the user previously stored in a storage device, and to place an order, including the item identity and the retrieved personal information.

187. The method of claim 186 including inserting a time code and/or a command into the information related to the item.

188. The method of claim 186 including inserting the item identity into the information related to the item.

189. The method of claim 186 including generating the data stream to include multiplexed first and second streams of packets, the first stream of packets including display information to generate an image on a display of the client system, and the second stream of packets including the computing application.

190. The method of claim 186 comprising including a visual prompt within the information related to the item offered for sale.

191. The method of claim 190 wherein the visual prompt includes any of a group including an indicia, instructions and a menu.

192.    The method of claim 186 comprising including an audio prompt within the information related to the item offered for sale.

193.    The method of claim 190 wherein the audio prompt comprises any one of a group including instructions, options and a menu.

194.    The method of claim 186 wherein the application program is for execution by the client system to detect an interaction by the user with a control device of the client system as a purchase action.

195.    The method of claim 194 wherein the interaction comprises a single action operation performed by the user.

196.    The method of claim 195 wherein the single action operation comprises a single selection of a button of a remote control device.

197.    The method of claim 186 wherein a storage device is associated with the client system and wherein the order is placed by the client system and communicated to the server system.

198.    The method of claim 186 generating an order confirmation responsive to the processing of the order.

199.    A system to place an order for an item, the system comprising:

        a server system to transmit a data stream, the data stream including information related to an item offered for sale; and

a client system to:

receive the data stream;

receive an order request from a user;

automatically determine an item identity for an item to which the order request pertains utilizing the information related to the item offered for sale;

automatically retrieve personal information of the user previously stored in a storage device; and

place an order, including the item identity and the retrieved personal information.

200.  The system of claim 199 wherein the client system is to receive the order request through detection of a purchase action by the user.

201.  The system of claim 200 wherein client system is to detect the purchase action during the showing and/or describing of the item by the client system utilizing the information related to the item offered for sale.

202.  The system of claim 200 wherein the client system is to receive input of the item identity into the client system as part of the purchase action.

203.    The system of claim 200 wherein the client system is to relate the purchase action to the information related to the item.

204.    The system of claim 203 wherein the clients system is to detect the purchase action during an offer of the item as specified any one of a group including by a time code and a command included within the information relate to the item.

205.    The system of claim 199 wherein the data stream includes multiplexed first and second streams of packets, the first stream of packets including display information to generate an image on a display of the client system, and the second stream of packets including an computing application.

206.    The system of claim 200 wherein the client system is to prompt the user to perform the purchase action utilizing the client system.

207.    The system of claim 206 wherein the client system is to display a visual prompt on a display of the client system.

208.    The system of claim 207 wherein the visual prompt includes any of a group including an indicia, instructions and a menu.

209.    The system of claim 206 wherein the clients system is to generate an audio prompt via an audio reproduction unit of the client system

210.    The system of claim 209 wherein the audio prompt comprises any one of a group including instructions, options and a menu.

211.   The system of claim 200 wherein the clients system is to detect the purchase action by detecting an interaction by the user with a control device of the client system.

212.   The system of claim 211 wherein the interaction comprises a single action operation performed by the user.

213.   The system of claim 212 wherein the single action operation comprises a single selection of a button of a remote control device.

214.   The system of claim 199 wherein the storage device is associated with the client system and wherein the order is placed by the client system and communicated to the server system.

215.   The system of claim 199 wherein the client system is to receive a client application program from the server system, the client application program being executable by the client system to place the order.

216.   The system of claim 215 wherein the client application program is received as part of the data stream.

217.   The system of claim 199 wherein the client system is to receive an order confirmation responsive to the processing of the order by the server system.

218.   A client system including:

a receiver (207) to receive the data stream including information related to an item offered for sale; and

a processing unit (224) to:

> receive an order request from a user;

> automatically determine an item identity for an item to which the order request pertains utilizing the information related to the item offered for sale;

> automatically retrieve personal information of the user previously stored in a storage device; and

> place an order, including the item identity and the retrieved personal information.

219. The system of claim 218 wherein the processing unit (224) is to receive the order request through detection of a purchase action by the user.

220. The system of claim 219 wherein processing unit (224) is to detect the purchase action during the showing and/or describing of the item by the client system utilizing the information related to the item offered for sale.

221. The system of claim 219 wherein the processing unit (224) is to receive input of the item identity as part of the purchase action.

222. The system of claim 219 wherein the processing unit (224) is to relate the purchase action to the information related to the item.

223. The system of claim 219 wherein the processing unit (224) to detect the purchase action during an offer of the item as specified any one of a group including by a time code and a command included within the information relate to the item.

224. The system of claim 218 wherein the receiver (207) is to receive the data stream as multiplexed first and second streams of packets, the first stream of packets including display information to generate an image on a display of the client system, and the second stream of packets including an computing application, the receiver further including a first extractor (204) to extract the first stream of packets from the data stream and a second extractor (206) to extract the second stream of packets from the data stream.

225. The system of claim 219 wherein the processing unit (224) and/or the receiver (207) is to prompt the user to perform the purchase action utilizing the client system.

226. The system of claim 225 wherein the processing unit (224) and/or the receiver (207) is to display a visual prompt on a display of the client system.

227. The system of claim 226 wherein the visual prompt includes any of a group including an indicia, instructions and a menu.

228.    The system of claim 228 wherein the processing unit (224) and/or the receiver (207) is to generate an audio prompt via an audio reproduction unit of the client system

229.    The system of claim 228 wherein the audio prompt comprises any one of a group including instructions, options and a menu.

230.    The system of claim 219 wherein the processing unit (224) is to detect the purchase action by detecting an interaction by the user with a control device of the client system.

231.    The system of claim 230 wherein the interaction comprises a single action operation performed by the user.

232.    The system of claim 231 wherein the single action operation comprises a single selection of a button of a remote control device.

233.    The system of claim 218 including storage device is associated with the client system and wherein the order is placed by the client system and communicated to a server system.

234.    The system of claim 218 wherein the receiver (207) to receive a client application program from a server system, the client application program being executable by the processing unit (224) to receive the order request and to place the order.

235.    The system of claim 234 wherein the receiver is to receive the client application program as part of the data stream.

236.    The system of claim 218 wherein the receiver (207) is to receive an order confirmation responsive to the processing of the order by the server system.

237.    A server system to facilitate placing of an order for an item, the system comprising:

a data source (107) to provide information related to an item offered for sale; and

an application source (101) to provide an application program for execution by the client system to receive an order request from a user, automatically to determine an item identity for an item to which the order request pertains, automatically to retrieve personal information of the user previously stored in a storage device, and to place an order, including the item identity and the retrieved personal information; and

a multiplexer (106) to communicate the information and the application program to a client system.

238.    The system of claim 237 wherein the multiplexer is to generate the data stream to include multiplexed first and second streams of packets, the first stream of packets including display information to generate an image on a display of the client system, and the second stream of packets including the computing application.

239.    The system of claim 237 wherein the application source and/or data source is to include a visual prompt within the information related to the item offered for sale.

240.    The system of claim 239 wherein the visual prompt includes any of a group including an indicia, instructions and a menu.

241.    The method of claim 237 wherein the application source and/or data source is to include an audio prompt within the information related to the item offered for sale.

242.    The method of claim 241 wherein the audio prompt comprises any one of a group including instructions, options and a menu.

243.    The method of claim 237 wherein a detection of a purchase action by the application program includes detecting an interaction by the user with a control device of the client system.

244.    The method of claim 243 wherein the interaction comprises a single action operation performed by the user.

245.    The method of claim 244 wherein the single action operation comprises a single selection of a button of a remote control device.